



GENERAL CONDITIONAL MAJOR OPERATING PERMIT (GCMP-01)

TEXTILE GREIGE OPERATIONS

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), and the 1976 Code of Laws of South Carolina, as amended, Regulation 61-62, the above mentioned sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources in accordance with the plans, specifications and other information submitted in the General Conditional Major permit application.

Sources operating under this general permit wish to limit their potential to emit as defined in South Carolina Air Pollution Control Regulation 61-62.1.

This permit is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on the attached pages of this permit.

Permit Number: GCMP01-xxxx-xxxx

Issue Date: April 01, 2006

Expiration Date: March 31, 2011

**Director, Engineering Services Division
Bureau of Air Quality**

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PART 1.0 APPLICABILITY

A. GENERAL APPLICABILITY

Condition Number	Condition
1.A.1	In accordance with this general conditional major permit, a textile facility may operate under the conditions contained herein if it is comprised of one or any combination of the following: existing boilers, new boilers, non-finishing greige operations, slashing operations, dryers, sizing storage vessels, fuel oil storage tanks, parts washers, emergency generators, vacuum filtration systems, air washer systems and other sources as approved by the Department. Facilities operating under this permit seek to limit their “potential to emit” to below the thresholds which define a major source by complying with federally enforceable conditions contained in the permit.

B. CRITERIA

Condition Number	Condition
1.B.1	<p>This general permit applies to textile greige plants meeting all of the following criteria:</p> <ol style="list-style-type: none">1. The facility is limited to textile greige plant operations only; specifically no finishing of greige fabric takes place.2. Total input production to the facility is less than 182,000,000 pounds per year or 91,000 tons per year of fiber.3. The facility uses only starch, acrylics, PVA, sizing auxiliaries, or combinations thereof which contain methanol and no other air toxic at a regulated level, as the coating material in slashing operations.4. Fuel combustion sources at the facility are fired on natural gas, propane, virgin fuel oil (to a maximum of 2.1 weight % sulfur) or spec oil.5. Operational restrictions will limit the facility’s potential to emit (PTE) to below major source thresholds, for Title V and Prevention of Significant Deterioration (PSD). Specifically, criteria pollutants are limited to less than 100 tons per year (TPY) each, single hazardous air pollutant (HAP) to less than 10 TPY, and combined HAPs to less than 25 TPY.6. The owner or operator of the facility has submitted a complete application for this general permit to the Department.7. The maximum size for a single boiler or multiple boilers in operation at one time is limited to 100 million BTU/hr heat capacity input.

PART 2.0 STANDARD CONDITIONS

The following conditions are applicable unless superseded by special permit condition(s):

Condition Number	Condition
2.1	Permit expiration terminates the source’s right to operate unless a complete renewal application has been submitted by the application renewal date. Upon receipt of an application for renewal, the source may continue to operate subject to final action by the Department on the renewal application.
2.2	An operating permit modification or renewal may be issued upon evidence of satisfactory operation during the prior operating period and receipt of a complete application.
2.3	This general permit has been issued based on information submitted by the owner/operator in the application. Any false information or misrepresentation in the application may be grounds for permit revocation.

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Condition Number	Condition
*2.4	This general permit expressly incorporates all the provisions of South Carolina Department of Health and Environmental Control Regulation 61-62.1, Section II.
2.5	No deviation from the plans and specifications reflected in the permit application as submitted is allowed, unless authorized in writing by the Bureau.
2.6	This general permit only covers emission sources and control equipment while physically located at the permitted plant location. Unless the permit specifically provides for equipment relocation, this general permit is void for an item of equipment on the day it is removed from the permitted location, notwithstanding the expiration date specified on the permit.
*2.7	Whenever the ownership/operation of a facility has been transferred, the Bureau shall be notified by the new owner/operator in accordance with SC Regulation 61-62.1, Section II. A transfer of this permit will be effective upon written approval by the Department.
*2.8	In accordance with SC Regulation 61-62.1, Section II, the permittee must comply with all applicable statute and regulations of the United States and the State of South Carolina. This permit does not relieve the permittee from compliance with applicable local laws, ordinances, and regulations. The Department may grant permission to proceed with minor alterations or additions without issuance of a permit when the Department determines that the alteration or addition will not increase the quantity and will not alter the character of the source's emissions.
*2.9	For all sources not required to have continuous emissions monitors the owner/operator shall, at all times, including periods of startup, shutdown, and malfunction, maintain and operate these sources in a manner consistent with good air pollution control practice for minimizing emissions to the maximum extent practicable. In accordance with SC Regulation 61-62.1 Section II, in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) District office within twenty-four (24) hours after the beginning of the occurrence. The owner/operator shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain at a minimum, the following: the identity of the emission point and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.
2.10	Any authorized agent of the Department, upon presentation of credentials, shall be allowed to enter the grounds of this facility during reasonable hours, to inspect any equipment required to be kept, used, calibrated, and maintained under this permit; to obtain samples of emissions; to have access to and a right to copy records required under this permit; to photograph and use monitoring and testing equipment for the purpose of monitoring and preserving information on activities, discharges or emissions authorized by this permit.
2.11	The general permit for the facility may be reopened for cause by the Department or to include any new standard or regulation which becomes applicable to a source for which three or more years remain on the original term of the permit.
*2.12	The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.
2.13	No deviation from the plans and specifications submitted with the construction permit application(s) or the conditions specified herein is permitted, unless authorized in writing by the Department. The owner/operator is responsible for satisfactory compliance with all Air Pollution Regulations/and Standards.
*2.14	The permittee shall complete and submit a new updated emissions inventory, if requested, consistent with the schedule approved pursuant to SC Regulation 61-62.1, Section III. This requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility.

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* These conditions shall be considered federally enforceable.

PART 3.0 SPECIAL CONDITIONS

This permit is subject to all standard conditions contained herein and to the following special conditions.

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following:

IDs	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only
Boilers	SO ₂	0.5 lbs/10 ⁶ BTU	6	NSPS Subpart Dc	No
Boilers	Opacity	20%	9	NSPS Subpart Dc	No
Boilers	SO ₂	3.5 lbs/10 ⁶ BTU	6	SC Regulation 61-62.5 Standard 1	No
Boilers	SO ₂	2.3 lbs/10 ⁶ BTU ¹	6	SC Regulation 61-62.5 Standard 1	No
Boilers	PM	0.6 lbs/10 ⁶ BTU	5	SC Regulation 61-62.5 Standard 1	No
Boilers	Opacity	20%	9	SC Regulation 61-62.5 Standard 1	No
Boilers	Opacity	40% ²	9	SC Regulation 61-62.5 Standard 1	No
Greige Operations	PM	19.7 lb/hr	5	SC Regulation 61-62.5, Standard 4	No
Greige Operations	Opacity	20%	9	SC Regulation 61-62.5, Standard 4	No
Greige Operations	Opacity	40% ³	9	SC Regulation 61-62.5, Standard 4	No
Fuel burning operations	SO ₂	< 100 Tons/year	6	SC Regulation 61-62.1, Section II (G) and (H)	No
Fuel burning operations	NO _x	< 100 Tons/year	7	SC Regulation 61-62.1, Section II (G) and (H)	No
Slashing operations	Methanol	< 10 Tons/year	*	SC Regulation 61-62.1, Section II (G)	No
Slashing operations	Total HAP	< 25 Tons/year	*	SC Regulation 61-62.1, Section II (G)	No
Plantwide	PM/PM ₁₀	< 100 Tons/year	5	SC Regulation 61-62.1, Section II (G) and (H)	No

¹ Applies to all sources in Charleston County greater than 10 million BTU/hour.² Applies to fuel burning operations constructed prior to February 11, 1971.³ Applies to process construction or modification on or prior to December 31, 1985.

* As approved by the Bureau

Condition Number	Condition
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3.A.1	The above emission limitations are derived from various Federal and State regulations that govern the operation of these sources. Operation at other than reported capacity must meet emission limits as specified in the applicable regulations based on that operating rate but shall not exceed the values reported to the Department for proof of compliance with SC Regulation 61-62.5, Standards 2, 7, and 8. All test methods must be the most recent revisions that are published in the Code of Federal Regulations as in effect on the date of this permit issuance, or otherwise approved by the Bureau.

B. CONTROL EQUIPMENT *

Condition Number	Condition
3.B.1	The owner/operator shall, to the extent reasonably practicable, maintain and operate any source including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. In addition, the owner/operator shall maintain a log of the time, magnitude, duration and/or any other pertinent information necessary to determine periods of startup, operation, shutdown and malfunction of a permitted facility or any periods during which a continuous monitoring system or monitoring device (if applicable) is inoperative. These records shall be maintained on site for a period of no less than five years following the event and shall be made readily available to representatives of this Department upon request.

* These conditions shall be considered federally enforceable.

C. OPERATIONAL FLEXIBILITY

Condition Number	Condition
3.C.1	<p>The following operational scenarios are allowed. No further action is required by the owner/operator prior to making the changes described below:</p> <ol style="list-style-type: none">1. The use of a fuel oil with a lower sulfur content than what was submitted as part of the permit application.2. On site unit relocation, provided that the permittee has demonstrated compliance with emission limitations at the new location, specifically the limitations contained in SC Regulation 61-62.5, Standards 1, 2, 7, and 8.

D. EXEMPT EQUIPMENT OR PROCESSES

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Condition Number	Condition
3.D.1	<p>The following is a list of equipment or processes emitting regulated air pollutants which are exempt from permitting due to insignificant emissions. Fuel use in exempt equipment shall be included in facility totals.</p> <ol style="list-style-type: none">1. Boilers and space heaters of less than 1.5×10^6 BTU/HR rated input capacity which burn virgin fuel.2. All storage tanks meeting the following requirements that store organic liquids with the given maximum vapor pressures, excluding those that store a hazardous air pollutant except as an impurity.<ol style="list-style-type: none">a. Volume \geq 40,000 gallons and Vapor pressure < 0.50psi; orb. 20,000 gallons \leq tank volume < 40000 gallons and Vapor pressure < 2.2 psic. Volume $< 20,000$ gallon.3. Self Contained parts washers, using only non-halogenated solvents.4. Storage silos used to store sizing material in solid form that are loaded and unloaded by closed transfers.5. Commercial air-conditioning units or air wash systems that collect dust from spinning and greige operations.6. Lab-scale fabric finishing and testing operations used for the purposes of research and development and/or quality control only.7. Any equipment used solely for the purpose of fire fighting.8. Filters located on vacuum or collection systems that collect fiber dust from greige operations.9. Emergency power generators of less than 150 KW rated capacity, or those which operate 250 hours per year or less and have a method to record the actual hours of use such as an hour meter.

E. ADDITIONAL CONDITIONS

Condition Number	Condition
*3.E.1	All boilers subject to 40CFR60, NSPS Subparts A and Dc shall comply with all requirements for notifications, monitoring, testing, record keeping and reporting required in these Regulations. If applicable, this includes supplier certification of the fuel to ensure sulfur content of 0.5% or less and semi-annual reports of such certification.
3.E.2	Natural gas and propane shall be the only fuels to be fired in dryers with all fuel usage data added to appropriate compliance reports.
*3.E.3	All storage tanks subject to 40CFR60, NSPS Subparts A and Kb shall comply with all requirements for notifications, monitoring, record keeping, and reporting required in these regulations. Records of tank size and type of material stored shall be maintained on any tank constructed, reconstructed, or modified after July 23, 1984.
*3.E.4	The permitted facility shall have emission limitations less than 100 TPY for SO ₂ , NO _x and PM ₁₀ (each pollutant) and less than 10 TPY for methanol. Compliance with these limitations will be demonstrated by monitoring and reporting twelve-month rolling sums according to Conditions 3.F.1, 3.G.1, and by meeting the applicability requirements of Condition 1.B.1.
*3.E.5	Facility fiber throughput shall be limited to 182,000,000 lb per year (91,000 tons per year).

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3.E.6	Facilities that have the authorization to burn recycled/waste oil as fuel shall maintain records of the following information: a. For each shipment, date and total amount of specification oil received. b. On site generated specification oil usage and dates. c. Chemical analysis of the fuel oil for total halogens, total lead, total chromium, total cadmium, total arsenic, total nickel, percent sulfur and BTU content shall be performed on each shipment, or annual sampling of on site batches shall be performed. d. Constituents for the fuel oil shall not exceed those defined for “specification” oil in SC Regulation 61-62.1.
3.E.7	All halogenated solvent cleaners (parts washers/degreasers) shall comply with all provisions of 40 CFR 63, NESHAP Subpart A & T. Batch vapor and in-line machines shall submit annual reports and semiannual exceedance reports in accordance with 40 CFR 63.468 to the Manager of the Technical Management Section.
3.E.8	The use of any non-specification oil, hazardous waste, or any other waste chemical as a fuel or any addition of these items to the fuel shall not be allowed without prior written approval from the Department.
3.E.9	Prior to the expiration date of this general conditional major operating permit, a representative of the Department may conduct a facility inspection. The findings of this inspection, past record of compliance, and future probability of compliance will be given appropriate weight in making the decision regarding permit renewal.

F. RECORDKEEPING AND MONITORING REQUIREMENTS *

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3.F.1	<p>The owner/operator shall maintain the following.</p> <ol style="list-style-type: none">1. Records of monthly stationary source fuel oil use (in gallons), including fuel oil grade and supplier certification of sulfur content of the fuel oil.2. Records of monthly stationary source natural gas (in standard cubic feet) and propane (in gallons), or alternative fuel approved by the Department.3. A twelve month rolling sum of the SO₂ and NO_x emissions calculated according to the equations in Condition 3.F.1.(4). Any alternative method must be approved by the Department.4. A twelve month rolling sum of NO_x and SO₂ emissions. Equation 1 shall be used to determine SO₂ emissions and Equation 2 shall be used to determine NO_x emissions: $\text{SO}_2 \text{ emissions/month} = (0.6 \text{ lb}/10^6 \text{ scf})(\text{scf of natural gas/month}) + \quad (\text{Equation 1})$ $(1.54 \text{ lb}/10^3 \text{ gal})(\text{gal of propane/month}) +$ $(71 \text{ lb}/10^3 \text{ gal})(\text{gal of low sulfur fuel oil/month}) +$ $(330 \text{ lb}/10^3 \text{ gal})(\text{gal of high sulfur fuel oil and spec oil/month}) +;$ <p>Low sulfur fuel oil contains 0.5% by weight sulfur or less. High sulfur fuel oil contains greater than 0.5% by weight sulfur to a maximum of 2.1% by weight sulfur. (For conservative estimates spec oil shall use the same emission factors as high sulfur fuel oil.)</p> $\text{NO}_x \text{ emissions/month} = (100 \text{ lb}/10^6 \text{ scf})(\text{scf of natural gas/month}) + \quad (\text{Equation 2})$ $(19 \text{ lb}/10^3 \text{ gal})(\text{gal of propane/month}) +$ $(20 \text{ lb}/10^3 \text{ gal})(\text{gal of No. 2 and No. 4 fuel oils/month}) +$ $(55 \text{ lb}/10^3 \text{ gal})(\text{gal of No. 5, No. 6 fuel, and spec oil/month})$ <ol style="list-style-type: none">5. Records of monthly sizing consumption including supplier certifications of the methanol content.6. A twelve month rolling sum of methanol emissions.7. Records of monthly fiber throughput in pounds of fiber per month including a twelve month rolling sum of the throughput rate.8. Records of monthly non-emergency generator(s) use and a twelve month rolling sum of hours of operation for non-emergency generators.9. Records of monthly emergency generator(s) use and a twelve month rolling sum of hours of operation for emergency generators.10. The emission thresholds in Section F(01) of the General Information Cover Sheet include projected generator use. If exceedances of Section F(01) thresholds occur, documentation shall be submitted to the Department to demonstrate that actual facility wide emissions are less than major source thresholds. Documentation shall include fuel usage and emission calculations for all fuel burning sources. <p>Records of all required monitoring data and support information must be retained on site for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. The Department must grant prior approval of any alternative method of record keeping.</p>

* These conditions shall be considered federally enforceable.

G. REPORTING REQUIREMENTS *

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3.G.1	<p>The owner/operator shall submit semi-annual reports of required monthly monitoring information specified in Condition 3.F.1.(1) through 3.F.1.(8).</p> <p>Semi-annual reports are due January 30th and July 30th each year. All reports should be addressed to the Manager of the Technical Management Section, Bureau of Air Quality.</p>

* These conditions shall be considered federally enforceable.